

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/11499

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 F25D17/04 F24F13/10 F16K3/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F25D F24F F16K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2 488 500 A (ATTANE DANIELLE) 19 February 1982 (1982-02-19) page 6, line 7 -page 7, line 29; figures 5-7	1,2
Y	WO 02 16843 A (BPL REFRIGERATION LTD ;CHITTAMPALLI SURYAPRAKASH (IN); MURTHY RAMG) 28 February 2002 (2002-02-28) claims 1-3; figures 3,4	1-3,6
Y	US 4 920 758 A..(JANKE DONALD E ET AL) 1 May 1990 (1990-05-01)	1-3,6
A	column 4, line 49 -column 8, line 17; figures 3-5	5,11,13
	-/-	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

2 February 2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 013, no. 360 (M-858), 11 August 1989 (1989-08-11) -& JP 01 118317 A (TOYO KINZOKU KK), 10 May 1989 (1989-05-10) abstract; figures 2-7	1-4
A	DE 198 06 041 A (BOSCH SIEMENS HAUSGERAETE) 19 August 1999 (1999-08-19) column 6, line 22 -column 8, line 16; figures 1-3	1-3, 11, 13
A	US 3 952 542 A (BERKOWITZ IRVING L) 27 April 1976 (1976-04-27) column 5, line 56 -column 6, line 18; figures 1-5	12
A	DE 79 24 975 U (KESSLER & LUCH GMBH) 19 June 1987 (1987-06-19)	
A	US 6 240 735 B1 (STARENCHAK ROBERT W ET AL) 5 June 2001 (2001-06-05)	

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 International Application No
 PCT/JP03/11499

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
FR 2488500	A	19-02-1982	FR 2488500 A1	19-02-1982
			JP 57037677 A	02-03-1982
WO 0216843	A	28-02-2002	WO 0216843 A1	28-02-2002
			AU 1883101 A	04-03-2002
US 4920758	A	01-05-1990	NONE	
JP 01118317	A	10-05-1989	JP 1634601 C	20-01-1992
			JP 2060412 B	17-12-1990
DE 19806041	A	19-08-1999	DE 19806041 A1	19-08-1999
			BG 104659 A	30-03-2001
			BR 9907891 A	17-10-2000
			CN 1290335 T	04-04-2001
			DE 59901443 D1	20-06-2002
			WO 9941556 A1	19-08-1999
			EP 1055089 A1	29-11-2000
			HU 0102108 A2	28-10-2001
			PL 342118 A1	21-05-2001
			TR 200002192 T2	21-12-2000
US 3952542	A	27-04-1976	CA 1031210 A1	16-05-1978
			DE 2506247 A1	26-05-1976
			FR 2295329 A1	16-07-1976
			GB 1517918 A	19-07-1978
			JP 1123599 C	30-11-1982
			JP 51063057 A	01-06-1976
			JP 57010343 B	25-02-1982
DE 7924975	U	19-06-1987	DE 7924975 U1	19-06-1987
US 6240735	B1	05-06-2001	NONE	